

SEQUENCE LISTING

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<120> POLYNUCLEOTIDE ENCODING AN ACTIVATED HUMAN
T-LYMPHOCYTE-DERIVED PROTEIN RELATED TO UBIQUITIN
CONJUGATING ENZYME

<130> D0034np

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<150> 60/308,706

<151> 2001-07-30

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<151> 2000-10-30

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Pro Cys Leu Arg Arg Glu Leu Lys Leu Leu Glu Ser Ile Phe His Arg	
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Gly His Glu Arg Phe Arg Ile Ala Ser Ala Cys Leu Asp Glu Leu Ser	
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Cys Glu Phe Leu Leu Ala Gly Ala Gly Gly Ala Gly Ala Gly Ala Ala	
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Trp Ser Val Glu Ser Asp Asp Pro Asn Leu Ala Ala Val Leu Glu Arg	
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Leu Val Asp Ile Lys Lys Gly Asn Thr Leu Leu Leu Gln His Leu Lys	
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Gly	Ala	Asp	Phe	Ile	Leu	Leu	Asn	Phe	Ser	Phe	Lys	Asp	Asn	Phe	Pro	
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Tyr	Val	Leu	Gly	Gly	Gly	Ala	Ile	Cys	Met	Glu	Leu	Leu	Thr	Lys	Gln	
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Val	Pro	Gly	Asp	Pro	Val	Arg	Ile	His	Cys	Asn	Ile	Thr	Glu	Ser	Tyr
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Tyr Leu Asn Gly Ala Val Ser Gly Ser Val Gln Ala Thr Asp Arg Leu
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Met Lys Glu Leu Arg Asp Ile Tyr Arg Ser Gln Ser Phe Lys Gly Gly
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Asn Tyr Ala Val Glu Leu Val Asn Asp Ser Leu Tyr Asp Trp Asn Val
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Lys Leu Leu Lys Val Asp Gln Asp Ser Ala Leu His Asn Asp Leu Gln
290 295 300

Ile Leu Lys Glu Lys Glu Gly Ala Asp Phe Ile Leu Leu Asn Phe Ser
305 310 315 320

Phe Lys Asp Asn Phe Pro Phe Asp Pro Pro Phe Val Arg Val Val Ser
325 330 335

Pro Val Leu Ser Gly Gly Tyr Val Leu Gly Gly Gly Ala Ile Cys Met
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Glu Leu Leu Thr Lys Gln Gly Trp Ser Ser Ala Tyr Ser Ile Glu Ser
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Val Ile Met Gln Ile Ser Ala Thr Leu Val Lys Gly Lys Ala Arg Val
370 375 380

Gln Phe Gly Ala Asn Lys Ser Gln Tyr Ser Leu Thr Arg Ala Gln Gln
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Ser Tyr Lys Ser Leu Val Gln Ile His Glu Lys Asn Gly Trp Tyr Thr
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Pro Pro Lys Glu Asp Gly
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Asp Glu Leu Ser Met Lys Phe Ile Asn Ala Glu Asn Lys Gly Ile Ile
35 40 45

Val Thr Ala Asn Ile Gln Glu Asn Tyr Pro Arg Gln Pro Pro Ile Trp
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Phe Ser Glu Ser Asp Asp Val Pro Val Ile Gly Met Ser Leu Gln Arg
65 70 75 80

Leu Thr Glu Thr Glu Glu Ser Thr Asn Ile Leu His Gln Val His Arg
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 Leu Val Ser Asp Leu Cys Ser Phe Tyr Asn Leu Gln Met Pro Cys Glu
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 Leu Pro Gln Ile Ala Pro Pro Val Arg Asp Asp Ile Asp Glu Gly Arg
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 Ala Gly Asp Gly Glu Val Asp Asp Asp Asp Glu Glu Glu Glu Asp Asp
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 Glu Asp Ala Asp Gly Asp Ile Glu Ile Val Glu Met Ala Glu Glu Asp
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 Pro Thr Ser Gln His Asp Val Gly Val Ser Lys Glu Gly Leu Asp Met
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 Val Gln Gly Ser Ile Thr Ala Thr Asp Arg Leu Met Lys Glu Ile Arg
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 Asp Ile His Arg Ser Glu His Phe Lys Asn Gly Ile Tyr Thr Phe Glu
 225 230 235 240
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 Val Asp Glu Asp Ser Pro Leu Phe Glu Asp Met Lys Lys Leu Lys Lys
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 Phe Pro Cys Asp Pro Pro Phe Val Arg Val Val Ala Pro His Ile Asn
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 325 330 335
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 Lys His Thr Ser Thr Tyr Ser Met Ala Arg Ala Gln Gln Ser Phe Lys
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 Ser Leu Gln Gln Ile His Ala Lys Ser Gly Cys Thr Phe Leu Cys Ser
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Thr Pro Ser Ser His Phe Phe Ala Leu His Leu Val Phe Phe Leu His
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405 410 415

Phe Phe Lys Leu Ser Phe Arg Gly Tyr Ile Ser Ser Leu Val Leu Tyr
420 425 430

Ser Phe Ser Arg His Leu His His Pro Phe Phe Thr Arg Phe Leu Ile
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<213> Drosophila melanogaster

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Asp Glu Leu Leu Cys Arg Phe Ile Asp Lys Asn Gly Lys Arg Tyr Asp
35 40 45

Ile His Ala Asn Ile Thr Glu Thr Tyr Pro Ser Ser Pro Pro Val Trp
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Phe Ala Glu Ser Glu Glu Thr Ser Val Thr Asn Ala Val Gln Ile Leu
65 70 75 80

Ser Asn Thr Asn Gly Arg Asp Asn His Val Ile Asn Gln Val Gly Ile
85 90 95

Leu Leu Arg Glu Leu Cys Arg Leu His Asn Val Pro Leu Pro Pro Asp
100 105 110

Ile Asp Asn Leu Ala Leu Pro Leu Gln Thr Pro Pro Pro Ser Ala Ser
115 120 125

Pro Leu Arg Cys Glu Gln Arg Pro Gly Gly Gly Gly Ala Gly Gly Gly
130 135 140

Gly Gly Pro His Gly Asn Glu Glu Thr Asp Ser Asp Gln Glu Glu Ile
145 150 155 160

Glu Asp Pro Ile Gly Glu Ser Glu Gln Glu Ser Glu Gly Asp Glu Asp
165 170 175

1000543 102004

Leu Pro Leu Glu Met Asp Asp Val Arg Ser Thr Ser Lys Lys Asp Asp
180 185 190

Met Glu Val Glu His Leu Ala Thr Leu Glu Lys Leu Arg Gln Ser Gln
195 200 205

Arg Gln Asp Tyr Leu Lys Gly Ser Val Ser Gly Ser Val Gln Ala Thr
210 215 220

Asp Arg Leu Met Lys Glu Leu Arg Asp Ile Tyr Arg Ser Asp Ala Phe
225 230 235 240

Lys Lys Asn Met Tyr Ser Ile Glu Leu Val Asn Glu Ser Ile Tyr Glu
245 250 255

Trp Asn Ile Arg Leu Lys Ser Val Asp Pro Asp Ser Pro Leu His Ser
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Asp Leu Gln Met Leu Lys Glu Lys Glu Gly Lys Asp Ser Ile Leu Leu
275 280 285

Asn Ile Leu Phe Lys Glu Thr Tyr Pro Phe Glu Pro Pro Phe Val Arg
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Val Val His Pro Ile Ile Ser Gly Gly Tyr Val Leu Ile Gly Gly Ala
305 310 315 320

Ile Cys Met Glu Leu Leu Thr Lys Gln Gly Trp Ser Ser Ala Tyr Thr
325 330 335

Val Glu Ala Val Ile Met Gln Ile Ala Ala Thr Leu Val Lys Gly Lys
340 345 350

Ala Arg Ile Gln Phe Gly Ala Thr Lys Ala Leu Thr Gln Gly Gln Tyr
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35 40 45

Thr Lys Leu Ser Ser Lys Thr Thr Ala Lys Leu Ser Thr Ser Ala Lys
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Arg Ile Gln Lys Glu Leu Ala Glu Ile Thr Leu Asp Pro Pro Pro Asn
65 70 75 80

Cys Ser Ala Gly Pro Lys Gly Asp Asn Ile Tyr Glu Trp Arg Ser Thr
85 90 95

Ile Leu Gly Pro Pro Gly Ser Val Tyr Glu Gly Gly Val Phe Phe Leu
100 105 110

Asp Ile Thr Phe Ser Ser Asp Tyr Pro Phe Lys Pro Pro Lys Val Thr
115 120 125

Phe Arg Thr Arg Ile Tyr His Cys Asn Ile Asn Ser Gln Gly Val Ile
130 135 140

Cys Leu Asp Ile Leu Lys Asp Asn Trp Ser Pro Ala Leu Thr Ile Ser
145 150 155 160

Lys Val Leu Leu Ser Ile Cys Ser Leu Leu Thr Asp Cys Asn Pro Ala
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Asp Pro Leu Val Gly Ser Ile Ala Thr Gln Tyr Leu Thr Asn Arg Ala
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Glu His Asp Arg Ile Ala Arg Gln Trp Thr Lys Arg Tyr Ala Thr
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<213> Homo sapiens

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35 40 45

Thr Pro Tyr Glu Gly Gly Arg Tyr Gln Leu Glu Ile Lys Ile Pro Glu
50 55 60

Thr Tyr Pro Phe Asn Pro Pro Lys Val Arg Phe Ile Thr Lys Ile Trp
65 70 75 80

His Pro Asn Ile Ser Ser Val Thr Gly Ala Ile Cys Leu Asp Ile Leu
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Lys Asp Gln Trp Ala Ala Ala Met Thr Leu Arg Thr Val Leu Leu Ser
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Leu Gln Ala Leu Leu Ala Ala Ala Glu Pro Asp Asp Pro Gln Asp Ala
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 Val Val Ala Asn Gln Tyr Lys Gln Asn Pro Glu Met Phe Lys Gln Thr
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 Ala Arg Leu Trp Ala His Val Tyr Ala Gly Ala Pro Val Ser Ser Pro
 145 150 155 160
 Glu Tyr Thr Lys Lys Ile Glu Asn Leu Cys Ala Met Gly Phe Asp Arg
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 Ala Thr Glu Leu Leu Leu Ser Asn
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 35 40 45
 Thr Pro Tyr Glu Gly Gly Lys Phe Val Leu Glu Ile Lys Val Pro Glu
 50 55 60
 Thr Tyr Pro Phe Asn Pro Pro Lys Val Arg Phe Ile Thr Arg Ile Trp
 65 70 75 80
 His Pro Asn Ile Ser Ser Val Thr Gly Ala Ile Cys Leu Asp Ile Leu
 85 90 95
 Lys Asp Asn Trp Ala Ala Ala Met Thr Leu Arg Thr Val Leu Leu Ser
 100 105 110
 Leu Gln Ala Leu Leu Ala Ala Ala Glu Pro Asp Asp Pro Gln Asp Ala
 115 120 125
 Val Val Ala Tyr Gln Phe Lys Asp Lys Tyr Asp Leu Phe Leu Leu Thr
 130 135 140
 Ala Lys His Trp Thr Asn Ala Tyr Ala Gly Gly Pro His Thr Phe Pro
 145 150 155 160
 Asp Cys Asp Ser Lys Ile Gln Arg Leu Arg Asp Met Gly Ile Asp Glu
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<213> Homo sapiens
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 20 25 30

Val Glu Ser Asp Asp Pro Asn Leu Ala Ala Val Leu Glu Arg Leu Val
 35 40 45

Asp Ile Lys Lys Gly Asn Thr Leu Leu Leu Gln His Leu Lys Arg Ile
 50 55 60

Ile Ser Asp Leu Cys Lys Leu Tyr Asn Leu Pro Gln His Pro Asp Val
 65 70 75 80

Glu Met Leu Asp Gln Pro Leu Pro Ala Glu Gln Cys Thr Gln Glu Asp
 85 90 95

Val Ser Ser Glu Asp Glu Asp Glu Glu Met Pro Glu Asp Thr Glu Asp
 100 105 110

Leu Asp His Tyr Glu Met Lys Glu Glu Glu Pro Ala Glu Gly Lys Lys
 115 120 125

Ser Glu Asp Asp Gly Ile Gly Lys Glu Asn Leu Ala Ile Leu Glu Lys
 130 135 140

Ile Lys Lys Asn Gln Arg Gln Asp Tyr Leu Asn Gly Ala Val Ser Gly
 145 150 155 160

Ser Val Gln Ala Thr Asp Arg Leu Met Lys Glu Leu Arg Asp Ile Tyr
 165 170 175

Arg Ser Gln Ser Phe Lys Gly Gly Asn Tyr Ala Val Glu Leu Val Asn
 180 185 190

Asp Ser Leu Tyr Asp Trp Asn Val Lys Leu Leu Lys Val Asp Gln Asp
 195 200 205

Ser Ala Leu His Asn Asp Leu Gln Ile Leu Lys Glu Lys Glu Gly Ala
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Asp Phe Ile Leu Leu Asn Phe Ser Phe Lys Asp Asn Phe Pro Phe Asp
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Pro Pro Phe Val Arg
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Ile Leu Leu Asn Phe Ser Phe Lys Asp Asn Phe Pro Phe Asp
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<210> 28

<211> 14

<212> PRT

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<400> 28

Val Arg Ile His Cys Asn Ile Thr Glu Ser Tyr Pro Ala Val
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<213> Homo sapiens

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Ala Val Glu Leu Val Asn Asp Ser Leu Tyr Asp Trp Asn Val
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<400> 32
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<210> 33
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<210> 34
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<400> 34
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<210> 35
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<400> 35
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<400> 36
Ala Pro Gly Ala Gly Gly Gly Pro Gly Gly Gly Pro Gly Pro Gly Pro
1 5 10 15

<400> 37
Glu Phe Leu Leu Ala Gly Ala Gly Gly Ala Gly Ala Gly Ala Ala Pro
1 5 10 15

<400> 38
Leu Leu Ala Gly Ala Gly Gly Ala Gly Ala Gly Ala Ala Pro Gly Pro
1 5 10 15

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Leu Ala Gly Ala Gly Gly Ala Gly Ala Gly Ala Ala Pro Gly Pro His
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His Leu Pro Pro Arg Gly Ser Val Pro Gly Asp Pro Val Arg Ile His
  1             5             10             15
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<210> 42
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<210> 43
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<400> 43
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<210> 45
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<400> 45
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<210> 46
 <211> 14
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 <213> Homo sapiens

<400> 46
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<210> 47
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<400> 47

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Tyr Arg Ser Gln Ser Phe Lys Gly Gly Asn Tyr Ala Val Glu Leu Val
 20 25 30

Asn Asp Ser Leu Tyr Asp Trp Asn Val Lys Leu Leu Lys Val Asp Gln
 35 40 45

Asp Ser Ala Leu His Asn Asp Leu Gln Ile Leu Lys Glu Lys Glu Gly
 50 55 60

Ala Asp Phe Ile Leu Leu Asn Phe Ser Phe Lys Asp Asn Phe Pro Phe
 65 70 75 80

Asp Pro Pro Phe Val Arg Val Val Ser Pro Val Leu Ser Gly Gly Tyr
 85 90 95

Val Leu Gly Gly Gly Ala Ile Cys Met Glu Leu Leu Thr Lys Gln Gly
 100 105 110

Trp Ser Ser Ala Tyr Ser Ile Glu Ser Val Ile Met Gln Ile Ser Ala
 115 120 125

Thr Leu Val Lys Gly Lys Ala Arg Val Gln Phe Gly Ala Asn Lys Ser
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Gln Tyr Ser Leu Thr Arg Ala Gln Gln Ser Tyr Lys Ser Leu Val Gln
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Ile His Glu Lys

<210> 48

<211> 20

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Primer

<400> 48

aggatcatct cgcacctgtg

20

<210> 49

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<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Primer

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20

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<210> 50
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<210> 51
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<400> 51
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<400> 52
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21

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